]E FARM INDEX

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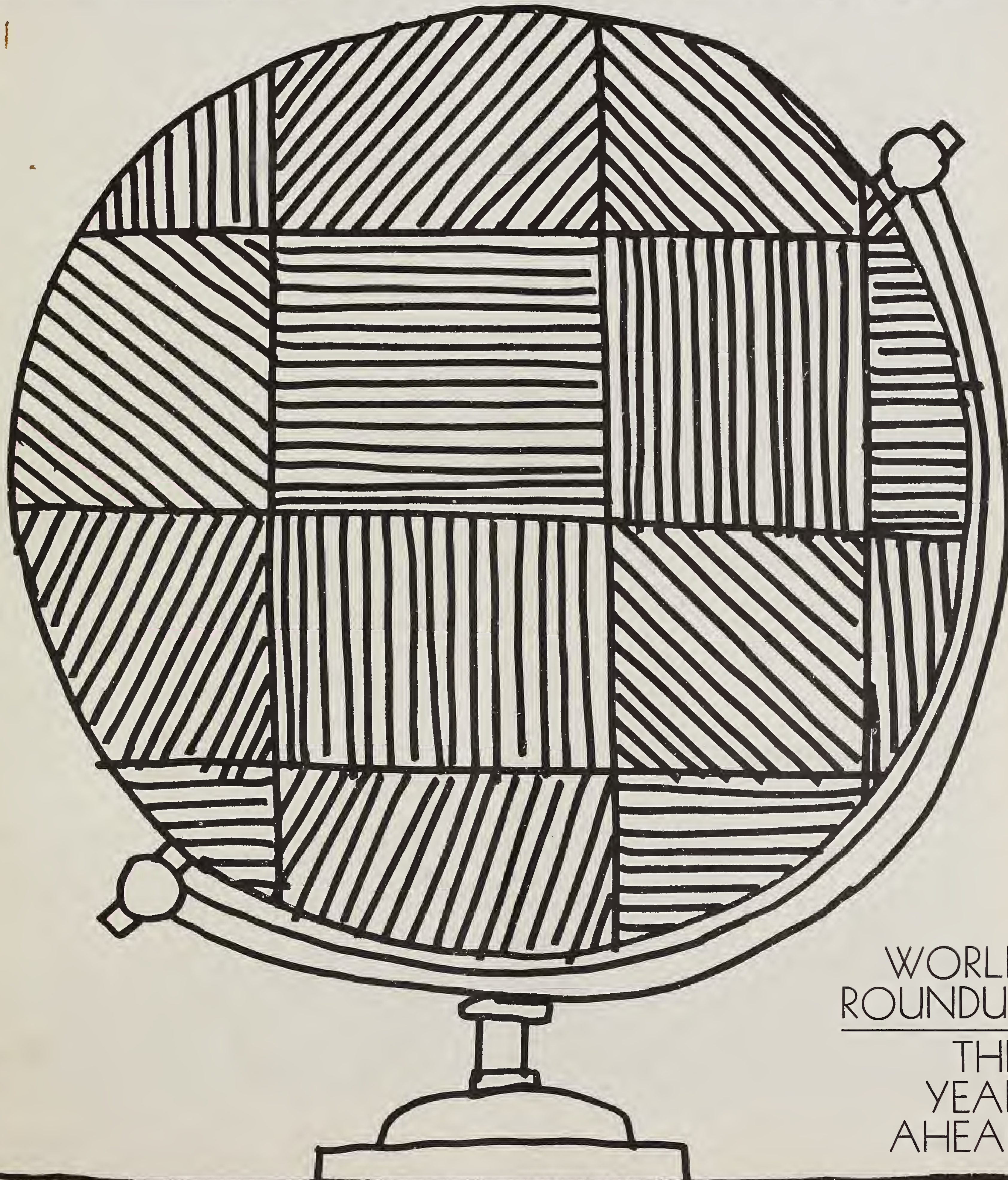


WORLD ROUNDUP

THE YEAR AHEAD

economic trends

ITEM	UNIT OR BASE PERIOD	'57-'59 AVERAGE	1964 YEAR	1964 NOVEMBER	1965 SEPTEMBER	1965 OCTOBER	1965 NOVEMBER
Prices:							
Prices received by farmers	1910-14 = 100	242	236	234	250	248	248
Crops	1910-14 = 100	223	238	234	224	220	218
Livestock and products	1910-14 = 100	258	235	235	271	273	274
Prices paid, interest, taxes and wage rates	1910-14 = 100	293	313	313	321	322	322
Family living items	1910-14 = 100	286	300	301	305	305	307
Production items	1910-14 = 100	262	270	269	277	276	276
Parity ratio		83	76	75	78	77	77
Wholesale prices, all commodities	1957-59 = 100	—	100.5	100.7	103.0	103.1	103.5
Commodities other than farm and food	1957-59 = 100	—	101.2	101.6	102.7	102.8	103.1
Farm products	1957-59 = 100	—	94.3	94.0	99.5	99.4	100.3
Food, processed	1957-59 = 100	—	101.0	100.9	106.7	107.0	107.5
Consumer price index, all items	1957-59 = 100	—	108.1	108.7	110.2	110.4	—
Food	1957-59 = 100	—	106.4	106.8	109.7	109.7	—
Farm Food Market Basket: [1]							
Retail cost	Dollars	983	1,015	1,018	1,051	1,048	—
Farm value	Dollars	388	373	380	413	415	—
Farm-retail spread	Dollars	595	642	638	638	633	—
Farmers' share of retail cost	Per cent	39	37	37	39	40	—
Farm Income:							
Volume of farm marketings	1957-59 = 100	—	118	157	140	181	159
Cash receipts from farm marketings	Million dollars	32,247	36,899	4,063	3,903	4,923	4,280
Crops	Million dollars	13,766	17,135	2,315	1,883	2,770	2,230
Livestock and products	Million dollars	18,481	19,764	1,748	2,020	2,153	2,050
Realized gross income [2]	Billion dollars	—	42.2	42.3	44.5	—	—
Farm production expenses [2]	Billion dollars	—	29.3	29.2	30.3	—	—
Realized net income [2]	Billion dollars	—	12.9	13.1	14.2	—	—
Agricultural Trade:							
Agricultural exports	Million dollars	4,105	6,347	608	485	587	—
Agricultural imports	Million dollars	3,977	4,082	382	354	411	—
Land Values:							
Average value per acre	1957-59 = 100	—	—	137	139 [3]	—	145
Total value of farm real estate	Billion dollars	—	—	157.8	159.4 [3]	—	165.4
Gross National Product [2]	Billion dollars	457.3	628.7	634.8	677.5	—	—
Consumption [2]	Billion dollars	294.2	398.9	404.6	432.2	—	—
Investment [2]	Billion dollars	68.0	92.9	92.6	102.0	—	—
Government expenditures [2]	Billion dollars	92.4	128.4	128.7	135.2	—	—
Net exports [2]	Billion dollars	2.7	8.6	8.8	8.1	—	—
Income and Spending: [4]							
Personal income, annual rate	Billion dollars	365.3	495.0	506.6	545.7	541.2	545.6
Total retail sales, monthly rate	Million dollars	17,105	21,802	21,661	23,774	23,959	24,013
Retail sales of food group, monthly rate	Million dollars	4,159	5,183	5,258	5,626	5,670	—
Employment and Wages: [4]							
Total civilian employment	Millions	64.9	70.4	70.8	72.2	72.5	72.8
Agricultural	Millions	6.0	4.8	4.7	4.4	4.6	4.2
Rate of unemployment	Per cent	5.5	5.2	4.9	4.4	4.3	4.2
Workweek in manufacturing	Hours	39.8	40.7	40.9	40.9	41.3	41.4
Hourly earnings in manufacturing, unadjusted	Dollars	2.12	2.53	2.56	2.63	2.63	2.64
Industrial Production [4]	1957-59 = 100	—	132	135	143	144	146
Manufacturers' Shipments and Inventories: [4]							
Total shipments, monthly rate	Million dollars	28,745	37,129	37,514	40,173	40,402	—
Total inventories, book value end of month	Million dollars	51,549	62,944	62,377	66,267	66,534	—
Total new orders, monthly rate	Million dollars	28,365	37,697	37,720	41,483	41,711	—

[1] Average annual quantities of farm food products purchased by urban wage-earner and clerical-worker households (including those of single workers living alone) in 1960-61—estimated monthly. [2] Annual rates seasonally adjusted third quarter. [3] As of March 1. [4] Seasonally adjusted.

Sources: U.S. Dept. of Agriculture (Farm Income Situation, Marketing and Transportation Situation, Agricultural Prices, Foreign Agricultural Trade and Farm Real Estate Market Developments); U.S. Dept. of Commerce (Industry Survey, Business News Reports, Advance Retail Sales Report and Survey of Current Business); and U.S. Dept. of Labor (The Labor Force and Wholesale Price Index).

THE AGRICULTURAL OUTLOOK

Farmers are beginning the new year in a generally stronger financial position than in 1965, thanks to last year's income gains and a further increase in market value of farm assets. As in in other years, much of the increase in assets is due to the uptrend in farm real estate values.

November figures showed a gain in farmland values of 6 per cent from the previous year, with significant gains in all but four states. Market values in Mississippi jumped 13 per cent. Six states showed gains of 10 per cent; five of 9 per cent.

Market values remained unchanged from a year earlier in Kentucky and West Virginia and increased only 1 per cent in Texas.

Prospects this year point to a further gain in land values with the usual variation among states because of special economic or climatic factors. For example, average market values of citrus grove land in Florida dropped in 1965 from the higher levels that had prevailed following the severe freeze in December 1963.

For 48 states, farm real estate market values averaged $8 an acre higher in November 1965 than a year earlier and averaged $152 per acre. The total value of farm real estate was estimated at $165.9 billion on November 1 or $54,300 per farm.

Farmers Sharing in Domestic Gains

Per capita disposable income of the farm population is expected to rise again this year, with dollar gains from both farm and nonfarm sources. Farmers are sharing in the general gains of the domestic economy. Increases in industrial production and employment contributed to a $4.4 billion November gain in national personal income from the October level of $541.2 billion. In addition, the seasonally adjusted rate of unemployment fell 0.1 per cent to 4.2 per cent of the civilian labor force in November. As a result, the demand for farm products continues strong.

Commodity Highlights

Supplies of fresh **citrus fruits,** especially oranges, grapefruit, lemons and tangelos (a tangerine-grapefruit hybrid) are moderately larger this winter than last. Supplies of frozen orange concentrate are up substantially. Prices for fresh and processed citrus at all levels of sales probably will continue below last winter.

Total supplies of canned and frozen **deciduous fruits** are down this winter and retail prices will remain higher than last winter. Supplies of raisins and pecans are up and there are substantial stocks of fresh apples, pears and grapes from last year's crops—though pear stocks are down somewhat from a year earlier.

Turkey production will be up substantially in 1966 because of favorable prices in 1965 and prospects for continued strong demand well into 1966. The crop is expected to exceed the record 108.1 million birds of 1961. Demand is expected to continue strong because of rising consumer incomes throughout the year and the continued small red meat supplies into summer. But greater competition, resulting from rising broiler and pork production, probably will hold turkey prices in the second half of 1966 under year-earlier levels.

Feed grain production for 1965 was estimated at 161 million tons in the December annual crop summary, 23 million more than the short crop of 1964 and a little above the previous record output in 1963. The feed grain supply for 1965/66 is now estimated at 216 million tons, 9 million more than a year earlier, but about 6 million below the 1959-63 average. With larger domestic use and exports in prospect for 1965/66, most of last year's record crop is expected to be consumed with only a small increase in carryover.

December reports indicate a 1965 **cotton** crop of about 15 million running bales, only slightly below 1964 production. The indicated national yield of 531 pounds of lint cotton per

harvested acre was record high and considerably above the 1959-63 average of 464 pounds. Record yields were reported for Texas and California and above-average yields for all other major producing states except North Carolina, Missouri and New Mexico. Total supply for the current crop year, including small imports, is expected to exceed disappearance by about 1.9 million bales. This would mean a carryover of all kinds of cotton on August 1, 1966 of 16 million bales—compared with the previous record-high 14.5 million in 1956.

January-November **milk** output was 115.9 billion pounds, 0.6 per cent below a year earlier. The decline reflects: fewer cows and, in the North Central Region, declining production per cow. Seasonal rises in milk production that began in December will continue in early 1966, but December and first quarter output are expected to be below a year earlier.

A further slight decline in **red meat** consumption is expected in 1966. Consumption in 1965 was down five to six pounds per person from the record 175 pounds of 1964. Both the reduction in 1965 and the expected reduction during 1966 are primarily due to declines in pork production. However, by the end of 1966 pork production likely will be averaging larger than a year earlier.

Hog producers are responding to the favorable relationship between hog and corn prices and are taking steps to expand output. The number of sows expected to farrow during December 1965-May 1966 is up 6 per cent from a year earlier. The size of the expansion now underway will determine future price levels. Since pigs born this spring will make up the bulk of the supply of slaughter hogs next fall, the effect on hog prices from the current expansion will not begin to be felt until the second half of this year. So price prospects for producers remain bright for 1966 although prices will begin slipping after midyear.

Cigars, Cigarettes, Cigarillos

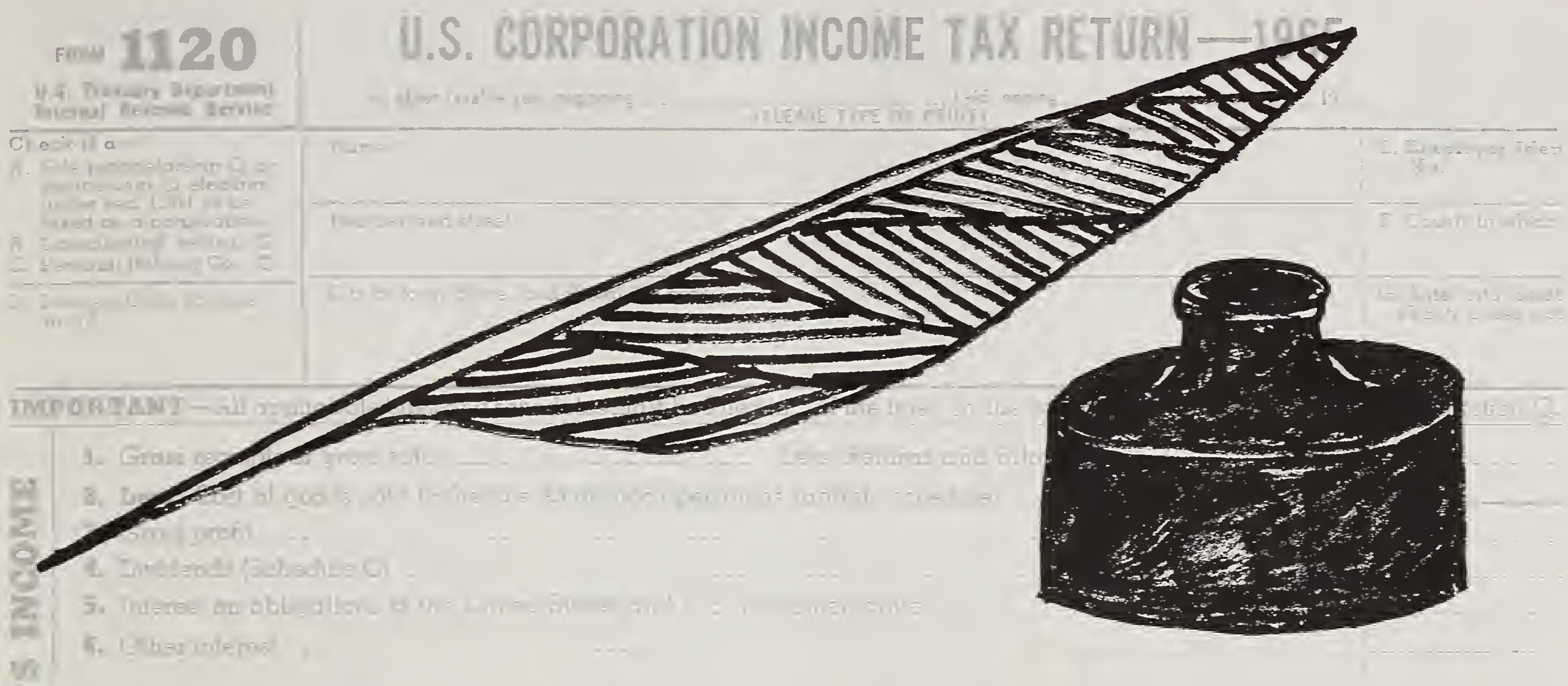
Cigarette consumption seems likely to gain gradually in 1966, but higher retail prices in a number of states that boosted their tax rates on cigarettes may be a retarding influence. In 1966, in accordance with law, cigarette packages will carry a health warning. Output in 1965 was estimated at a record 561 billion cigarettes—21 billion above 1964 and 10 billion above 1963. U.S. smokers (including citizens overseas) consumed about 532 billion cigarettes in 1965—about 4 per cent more than in 1964 when cigarette use declined 2.4 per cent from 1963. Exports and shipments to Puerto Rico and other U.S. islands took about 5 per cent of the 1965 output.

In 1966, with an assist from rising consumer incomes, cigar and cigarillo consumption seems likely to show a modest increase. The 1965 consumption of cigars and cigarillos by U.S. smokers is estimated at 8.8 billion, 3 per cent under 1964's record level but 21 per cent above 1963.

Effects of Acreage-Poundage Program.

Congress authorized a new production adjustment program for tobacco in April 1965. In May, growers of flue-cured tobacco approved the new acreage-poundage program for three crops—1965, 1966 and 1967. The program has completed its first season with considerable success. A big step was taken in reducing record-large supplies toward a better balance with requirements and the quality of flue-cured offerings on the market improved substantially. In the 1965 season, growers received an average price of about 64½ cents per pound—about 5½ cents higher than the average for the three preceding crops.

The acreage-poundage program has three principal advantages over the acreage-allotment program: (1) With limits established on marketings through poundage quotas, growers are encouraged to improve quality. (2) It maintains a more effective balance between production and consumption over time and gives growers a freer hand in using production inputs. (3) If growers fall short of their poundage quota in a given year, they can make it up the next year; if they are over, the excess is deducted from their next year's quota.



INCORPORATION + TAXATION = CHANGES

If you incorporated your farm operation during 1965, you'll find there are a number of differences in the federal income tax return you'll file this year, as well as different rules to follow in filing declarations of estimated tax.

Farm corporations are still so new on the scene that few farmers are aware of the sweeping changes such a setup may make. Income tax aspects are a case in point.

Under the 1964 Revenue Act, the first $25,000 of corporate income after deductions (which include the farmer-shareholder's reasonable salary) is subject to income tax at the corporate rate of 22 per cent. Any additional income is taxed at 48 per cent (for tax years beginning on or after January 1, 1965).

However, a qualifying farm corporation electing not to be taxed as a corporation (a subchapter S corporation) files only an information return. The income, capital gains and any losses are allocated to the shareholders and reported in their individual returns.

Most of the Internal Revenue Code provisions for business deductions from farmers' incomes also apply to farm corporations. For example, a corporation, like an individual farmer, is entitled to deduct, within limits, expenses for soil and water conservation and for clearing of new land. Commodity Credit Corporation loans are treated in the same way, too.

As a general rule, depreciation deductions are allowed for a corporation as for an individual. The variation to watch for is the $2,000 limit on a deduction for extra first-year 20 per cent depreciation that applies to corporations. A married farmer operating as a sole proprietor or as a member of a partnership and filing jointly with his spouse can claim up to $4,000.

Another difference is in the provisions regarding dividends received. Dividends received from a domestic corporation by a farm corporation are included in computing the 85 per cent deduction for dividends received. But as a proprietor or partner, a farmer would be entitled to exclude such dividends only up to the limit of his dividend exclusion.

The fast methods of depreciation are limited to new property for a corporation. Property transferred to the corporation by the farmer-shareholder isn't "new" because it was already owned by the farmer. The corporation isn't entitled to the additional first-year depreciation deduction on property transferred to the corporation by a shareholder who owns more than 50 per cent of the outstanding stock—even if the shareholder never claimed it in any of his returns.

The requirements for making declarations of estimated tax also are different for the farmer-shareholder in a farm corporation. The ordinary estimated tax provisions permit an individual farmer to file his return by February 15 in lieu of a declaration or to file only one declaration on January 15. However, after in-

corporation, the farmer as an employee must file and pay his estimated tax quarterly. Because the farm corporation is paying for agricultural labor, it doesn't have to withhold the farmer's income tax from each paycheck.

A corporation doesn't get the 50 per cent capital gains deduction allowed individuals but it does get the benefit of the 25 per cent alternative method if it results in a lower tax. Capital gains or tax exempt income received by a corporation becomes part of its accumulated earnings. When these earnings are distributed to the shareholders, they are taxed as ordinary dividends.

Capital loss provisions also are slightly different for a corporation than for an individual. An individual taxpayer can deduct as much as $1,000 of capital losses from his gross income. A corporation is permitted to subtract such losses only from capital gains. A net capital loss cannot be deducted from a corporation's ordinary income, but it can be carried over for five years. An individual is allowed to carry capital losses from one year to another indefinitely.

An individual generally files and pays his taxes by calendar years. A corporation may elect whatever tax year is most convenient—October 1 to September 30, for example. It also may operate on either a cash or an accrual basis. (*1*)

New Farm Bill Lowers Cotton Price Supports to Up U.S. Foreign Sales

The new cotton legislation for the 1966-69 crops of upland cotton is significantly different from past programs in many ways. For example, producers who cooperate by planting less than the allotted acreage will receive direct payments. At the same time, price support loans are being reduced to 21 cents in 1966 in an effort to boost cotton sales in the U.S. and abroad.

In other respects, though, the new program is similar to the old ones. It continues the one-price program, maintains the national minimum acreage allotment at 16 million acres and retains the domestic allotment concept.

Here briefly is a list of some of the major changes:

—For 1966 and succeeding crop years, the new program establishes a domestic allotment within the farm allotment of not less than 65 per cent of the farm allotment. Except in the case of small farms, this will require a reduction in 1966 of at least 12.5 per cent from each farm's share of the 16-million acre allotment required for participation in the program.

—Producers may divert up to 35 per cent of their farm allotment. Payments made for minimum diverted acreage, 12.5 per cent, will be at the rate of not less than 25 per cent of the parity price multiplied by the projected yield of the acreage required to be retired.

Producers who divert the maximum 35 per cent of their allotment may, as determined by the Secretary of Agriculture, receive up to 40 per cent of parity on the additional 22.5 per cent of acreage.

—The basic loan level to participants for Middling 1-inch cotton is set at 21 cents per pound for the 1966 crop, down from 29 cents for 1965. For each of the crops in 1967 through 1969, the loan level may not exceed 90 per cent of the estimated world market price in each marketing year.

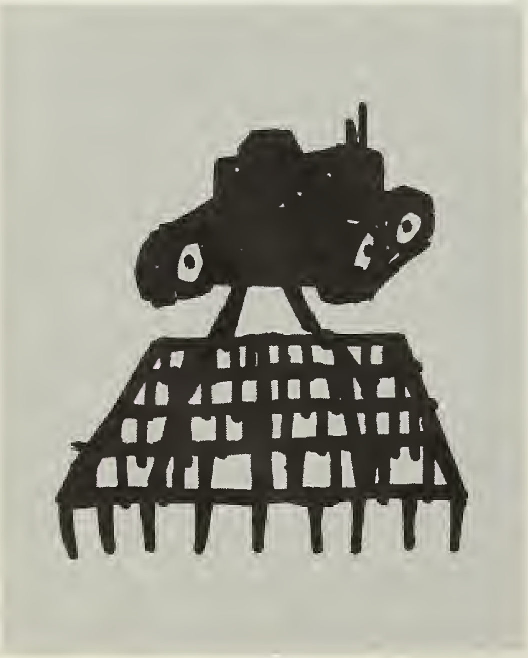
—Direct payments will be made to producers in an amount which, when added to the loan rate, will reflect not less than 65 per cent of parity on the projected yield multiplied by permitted acreage.

—The new legislation permits holders of 1965 acreage allotments to stay out of the program, forego all price supports and payments, plant cotton in excess of their acreage allotment and sell their cotton for export without penalty.

However, producers who do not enter the program must export their entire production. (*3*)

HARROW: Depreciation on a new or used spiketooth harrow is estimated as it would be for tax purposes and allowances are made for repairs, shelter, insurance, taxes and interest if the purchase is on credit. The total is divided by acres of use per year to get the cost per acre. Tractor costs must be added. (See tractor table in August 1965 Farm Index.)

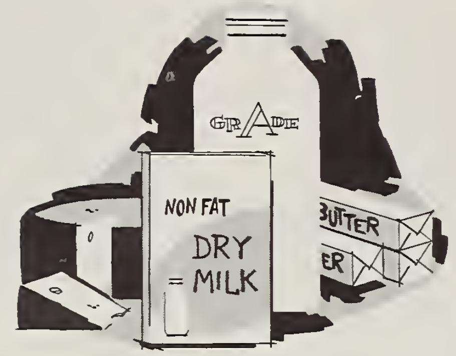
The figures are averages of the replies to a 1960 survey of wheat farms in Northeast Colorado. (*2*)



Size in feet	24
Cost when new	$197
Investment in 1960	$108
Acres of use annually	150
Annual fixed costs:	
Depreciation[1]	$10.43
Repairs	1.20
Shelter, insurance, taxes	2.13
Interest[2]	8.64
Total	$22.40
Per acre	$.15
Size of tractor in bottoms	4, 5 or 6
Hours per acre	0.12, 0.10 or 0.10

[1] The cost when new minus 10 per cent—the remainder divided by estimated years of use. [2] Eight per cent.

CONTROLS FOR THE CONTRARY COW



Requested by farmers, marketing orders help provide a balanced milk supply despite cows, whose only way of providing enough is by producing too much on occasion.

The trouble with cows is they haven't heard of supply and demand

Production varies from day to day, not to mention season to season, and seldom in any close relation to the needs of people who drink milk.

If an area is going to have a reliably steady supply of milk, the minimum level of deliveries to the market has to be about as great as the maximum needs at any given period.

Inevitably, the situation results in production in excess of fluid (bottled) milk use during some of the year.

Too perishable to be kept for any length of time, the excess is added to supplies of milk slated for use in such storable manufactured products as butter and cheese.

In this situation, milk producers have turned to federal and state governments for marketing orders to establish orderly fluid milk pricing. The orders also give the producer greater assurance of adequate returns for his product.

There are currently 76 federal milk orders covering urban areas in all or parts of 37 states. In addition, milk control agencies in 20 states determine prices.

In all, milk sold under the state and federal marketing orders represents about 90 per cent of all milk that meets sanitary standards for fluid use.

Both the federal and state market orders also influence milk prices outside their sales areas.

Some 54 billion pounds of milk moved directly to federal orders markets in 1964. About 60 per cent of the milk under federal orders was sold for fluid use.

Sanitary regulations for milk sold in fluid markets are established and administered by local and state authorities other than the price control agencies. Federal orders operate within the framework of local and state sanitary regulations.

In addition to establishing minimum prices, several states have producer allotments, bases or contracts to control production or limit marketing of milk. Federal orders do not have this feature.

Milk producers of a given area desiring a federal order petition the Secretary of Agriculture for a public hearing and indicate the need for an order. An order or amendment becomes effective when approved in a referendum by two-thirds or more of the producers supplying milk in the area (three-fourths of the producers in handler pool orders).

Under milk marketing orders, dealers must pay certain minimum prices to producers for different uses of milk. Class I milk goes into fluid use. Class II is the milk used for manufactured products.

Milk producers get an average or "blend" of the price for class I milk and the lower price class II milk in proportion to the amount going into the different outlets.

Generally, class I prices are lowest in the heavy milk-producing areas of Wisconsin and Minnesota. Prices for other areas tend to rise in relation to the distance from this area and by about as much as the cost of transportation.

Prices under the orders are established according to formulas aimed at adjusting milk production to the needs of the area.

One type of formula rests on prices in the Minnesota-Wisconsin area plus a differential. The size of the differential is determined in part by the price at which milk may be procured from other areas.

Another formula relates the price of class I milk to general economic factors such as production cost items, changes in per capita income and changes in the general level of wholesale prices.

One thing these and other formulas have in common: They have built-in adjustment factors that make it unnecessary to hold a hearing to establish each new level of milk prices. Most such formulas automatically lower class I prices when supplies are much in excess of demand and raise them when supplies begin to run short.

Milk orders have several plans to get a more even flow of production. One such plan establishes a base for the producer, usually tied to the period of low production. The farmer then gets one price for deliveries up to the base level; a lower price for quantities in excess of the base.

Another plan pegs the class I price at a higher level during the short seasons; drops the price when supplies begin to rise.

In other marketing areas, payments are withheld from producers in the flush season; repaid during the short season. Payments are based on total deliveries during each season. (*4*)

Rotation	Yield per acre				Returns per acre over specified expenses[1]	
	Cotton lint	Grain sorghum	Oats	Sorghum hay	Four-row equipment	Two-row equipment[2]
	Pounds	Pounds	Bushels	Tons	Dollars	
Advanced management practices:[3]						
Cotton-grain sorghum-oats/clover	270	3,000	40	—	23.24	21.72
Cotton-sorghum hay-oats/clover	270	—	40	3.0	20.75	18.89
Cotton-oats/clover	285	—	50	—	22.92	20.67
Grain sorghum-oats/clover	—	3,000	40	3.0	21.49	19.92
Sorghum hay-oats/clover	—	—	40	3.5	17.84	16.86
Oats/clover (continuous)	—	—	50	—	16.97	16.15
Sorghum hay (continuous)	—	—	—	3.0	25.71	24.62
Existing management practices:						
Cotton	169	—	—	—	13.65	7.93
Grain sorghum	—	1,800	—	—	19.30	17.73
Oats	—	—	35	—	8.52	7.93
Sorghum hay	—	—	—	2.0	22.69	21.82

[1] The listed costs and prices approximate prices paid and received in 1964. [2] On many small farms, four-row equipment cannot be used under optimum conditions because underuse substantially increases depreciation costs. [3] The yield estimates reflect the production that might be expected from one full acre of the specified crop. The estimated returns reflect income that might be expected from one acre of the specified rotation. For example, the returns of $23.24 for the cotton-grain sorghum-oats/clover rotation assume one-third of an acre in cotton, one-third of an acre in grain sorghum and one-third of an acre in oats/clover.

GOOD ISN'T ENOUGH: Yesterday's model farm may be today's just so-so operation, what with rapidly changing technology. One way to beat the problem is to make technology work for the farm. Take a look at estimated yields and returns for certain farms in Texas in the table above. One set of figures is based on practices typical of the area; the other represents the results of using advanced techniques, techniques which correspond closely to current recommendations of research and extension specialists and to practices followed by the best farmers in the areas. Rotation systems are an example. Despite their advantages, they are little used in the area and thus are listed with the advanced practices.

The most important ingredients in advanced management are: the use of fertilizer rates appropriate to the individual farm, generally on the basis of soil tests; the use of a cropping system or rotation to control root rot and other plant diseases and pests; a more knowledgeable use of insecticides to avoid costly waste while still providing adequate control; and weed control along with timely planting.

The figures in the table are based on budgets worked out for the rolling soils in the Central Blackland Prairie of Texas. The complete budgets set forth detailed information on production requirements and expected costs and returns for alternative crop enterprises and rotation and for the major livestock systems in the area. The budgets are the work of the Texas Agricultural Experiment Station in cooperation with ERS. (*5*)

Feeding One Lot of Cattle Pays Off More Than Year-Round Feedlot Plans

The traditional way of doing things plays an important role in agriculture. Take cattle feeding as an example. In the Corn Belt, feeder cattle generally are bought in the fall, fattened and then sold the following spring or fall, depending on their weight at the time of purchase.

Tradition is usually founded on sound reasoning, and the case of the feeder cattle is no exception. The Corn Belt practice of buying and selling feeders developed because corn and other feed grains are harvested at the same time the supply of fall grass plays out on western ranges and ranchers send their spring-born calves to market.

But even the most common farming practices are eventually altered. The recent expansion of beef cow herds in the North Central and Southeastern States, coupled with an increase of feeder cattle shipments from the Southwest, has resulted in supplies of feeders available throughout the year.

Also some livestock farmers in the Midwest have installed mechanized equipment in their feedlots. In order to spread the larger fixed costs of their new setups, feedlot owners are increasing their output of finished animals and scheduling production throughout a 12-month period.

Supposedly the idea of producing several lots of cattle throughout the year also takes some of the gamble out of dealing with the cattle market. And the farmer stands a chance of making enough on one or two sales to make up for losses on others.

Although the idea of producing and marketing cattle all year long sounds reasonable enough, a recent analysis of cattle price spreads indicates it isn't quite true.

Specialists studied monthly averages of market prices from 1952 to 1963 for feeders bought in Kansas City and sold in Chicago. They compared year-round feedlot operations with buying and selling once a year for three producing plans.

The three types of year-round cattle production considered were: long-fed good and choice steer calves bought at 300 to 550 pounds and sold as choice grade weighing 900 to 1,100 pounds; short-fed (for six months) steers purchased when weighing 500 to 800 pounds and sold at 900 to 1,100 pounds; and short-fed heavy steers (all grades) bought at 801 to 900 pounds and sold at 1,100 to 1,300 pounds. In each case, 120 head

were produced annually.

During the year studied, the difference between the average price per hundredweight for feeders and the average price for finished beef for all three full-time feedlot plans was less than the spread for the traditional method of buying in the fall and selling in the following spring or fall.

For one production setup (long-fed steer calves), replacing feeders more frequently than once a year reduced the mean price spreads. (*6*)

Farmers Boost Crop-Hail Insurance Coverage to Reduce the Risk of Hail

Not all rain can be considered "pennies from heaven." When rain drops fall as hail they are more likely to be "dollars from farmers' profits" unless crops are protected by some form of insurance.

Today's higher production costs and larger size farms have combined to make farmers more sensitive to the risk of hail damage. And many farmers are choosing to reduce this risk by upping their use of crop-hail insurance.

More than $2.8 billion of crop-hail insurance coverage was purchased in 1963—twice the amount bought in 1951. The coverage on five major crops—corn, wheat, tobacco, soybeans and cotton—accounted for almost 80 per cent of this total.

Farmers have collected on their insurance anywhere from $35 million in 1952 to $81 million in 1962. The percentage of their net premiums returned as payments on losses varied from 94 per cent in 1956 to 46 per cent in 1959. And farmers in all but two regions had at least one year in which 100 per cent or more of their net premiums were returned to them in loss payments.

Crop-hail policies afford farmers complete protection against all hail damage. Crops can be insured for their full value, thereby protecting farmers' profits as well as production costs. Also, any part of a crop may be insured; damages are settled by the acre.

Farmers can purchase crop-hail coverage almost anytime during the growing season, giving them the chance to evaluate the worth of the crop. If the crop is poor, it may not be worth the premium payments, whereas a bumper crop might warrant extra insurance. However, no reductions in premium rates occur by delaying purchase since crop values increase as the harvest approaches.

Regular crop-hail insurance is offered by a number of mutual hail insurance companies, stock fire and marine insurance companies and, in some areas, state departments for hail insurance.

Hail is one of the unavoidable risks included under the Federal Crop Insurance Corporation (FCIC) all-risk insurance program. But, FCIC coverage must be bought before planting and it covers only production costs. (*7*)

Thanks to Johnny Appleseed

More than a century ago, John Chapman (better known as Johnny Appleseed) made it his life's business to see that appleseeds went west with the pioneers. He did his job well.

Recent tree surveys across the nation show that the Western States rank No. 1 in the percentage of young apple trees planted in recent years. The Central States are second.

In the years ahead it is highly likely that the western and central U.S. will be growing more and more of the annual U.S. production.

By 1970 apple production in Washington (already the largest producer) is slated to increase markedly. Output is expected to fall within the range of 33 to 48 million bushels compared with 25.5 million bushels in 1964. Recent heavy plantings of young trees in Oregon and Idaho also point to substantial increases for these two states. (*8*)

Total Cash Farm Income From Georgia Poultry Hits $300 Million Mark in '64

Poultry production is big business in Georgia—and it's getting bigger all the time.

In 1964 Georgia was the No. 1 poultry producing state in the nation, leading in broiler production and second only to California in gross farm income from eggs.

Total farm income from Georgia poultry amounted to more than $300 million in 1964. Broiler production accounted for just about $174 million; eggs for $112 million; turkeys, roughly $6 million; and sales of farm chickens, more than $7 million. The remainder was the value of chickens consumed on the farm.

Poultry farms made up well over half of all Georgia's commercial farms in 1964. Cash farm income from poultry constituted about 71 per cent of total farm income. By 1967 it is estimated that income from poultry will rise to nearly 81 per cent of total cash receipts from farming. Increases of 17 and 7 per cent are projected for receipts from eggs and broilers, respectively.

Most of the poultry production in the state is concentrated in North Georgia. In 1964 this area contained more than two-thirds of the commercial egg production, 95 per cent of the hatching egg production, 90 per cent of the turkey production and 85 to 90 per cent of the broiler production.

Income and retail sales in nearby communities feel the impact.

For example, growing broilers and turkeys and producing market and hatching eggs provides employment for almost 17,000 people. Nearly 11,000 have jobs in hatcheries, feed mills and poultry and egg processing plants. And additional people are employed in transporting finished products to markets outside the state and in distributing Georgia-produced poultry products consumed within the state. (*9*)

Land Prices Likely to Continue Rising This Year as Buyers Vie for Farmland

Increasingly stiff competition for the limited supply of farmland for sale in the U.S. points to another year of relatively tight market conditions and further rising land prices in 1966.

In the year ended March 1, 1965, the index of value per acre moved from 131 to 139 (1957-59 = 100). The total value of all farm real estate reached $159.4 billion—the equivalent of $52,000 per farm or $146 per acre.

Regionally, values per farm in 1964/65 ranged from $22,300 in the Appalachian States to $139,000 in the Pacific Region. Per farm values in typical Corn Belt States averaged $50,000 to $60,000. In the Southeast, excluding Florida, per farm values ranged from $21,000 to $36,000.

Partly responsible for this continuing rise in land prices is the increased use of credit and a gradual liberalization of terms under which it is extended.

In 1964/65, 73 per cent of the reported sales of farm real estate were credit financed—and the debt incurred averaged about 72 per cent of the purchase price.

Sellers of farm real estate continued to be the major source of credit, financing 38 per cent of the total number of credit transfers in 1964/65. Commercial banks financed 18 per cent; life insurance companies, 16 per cent; federal land banks, 10 per cent; and other lenders, 18 per cent.

Regionally, seller-financing varied from 23 per cent of all credit sales in the Appalachian Region to 65 per cent in the Pacific Region. Financing by commercial banks ranged from 6 per cent of the total in the Pacific Region to 46 per cent in the Northeast. (*10*)

Sheep Dip

U.S. shorn wool production in 1965 was at its lowest level since the late 1800s—and a further slight drop is in prospect for 1965 was at its lowest level back in sheep numbers on farms.

The January 1 inventory of sheep and lambs is estimated at about 26.5 million, down from the 26.7 million a year earlier.

The expected decline in sheep numbers is likely to result in a shorn wool production for 1966 of about 212 million pounds, grease basis. This is about 1 million pounds less than the production estimated for 1965.

The clean wool equivalent volume of 1966 shorn and pulled wool also is likely to total about 112 million pounds, down about 1 million pounds from last year. (*11*)

Commercial Farmers Held More Debt Than Noncommercial Farmers in 1960

When it comes to statistics, several meaningful comparisons are better than only one or two. This is particularly true of the farm debt picture. A good example is the data from the 1960 Sample Survey of Agriculture, conducted by the Bureau of the Census in cooperation with the Federal Reserve System, the Farm Credit Administration and USDA's Economic Research Service:

—Of over 3.2 million farm operators in business in 1960, 58 per cent, or nearly 1.9 million, reported debt. Thirty per cent reported major real estate debt; 47 per cent reported non-real estate and related debt.

—Sixty-four per cent of the commercial farmers reported owing debt, compared with 46 per cent of the noncommercial ones.

—By economic class of farm, the percentage of operators reporting debt were: class I ($40,000 or more in farm sales), 76 per cent; class II ($20,000 to $39,999 in farm sales), 75 per cent; class III ($10,000 to 19,999), 73 per cent; class IV ($5,000 to $9,999), 66 per cent; class V ($2,500 to $4,999), 55 per cent; and class VI ($50 to $2,499), 47 per cent.

—By region, the fewest operators with debt were in the South, 56 per cent. The North was next with 66 per cent, and the West last with 68 per cent.

—By type of farm, 54 per cent of the cotton growers and 54 per cent of the tobacco farmers reported owing debt. Sixty-two per cent of the livestock producers were using farm credit as were 67 per cent of the cash grain farmers and 71 per cent of the dairymen.

—By tenure, the part-owners were most often carrying some debt. Seventy-three per cent of them reported having debts, compared with 59 per cent of the full owners, 60 per cent of the managers and 61 per cent of the tenants.

—The number of farm operators with debt dropped as the age level rose. In the under-35 age group, 78 per cent of the operators had some debt; from 35 to 44, 74 per cent reported debt; from 45 to 54, 66 per cent; from 55 to 64, 54 per cent; and 65 and over, 42 per cent. (*12*)

Big Gains in Feed Grains Boost Fed Cattle Numbers in Nebraska

Triple the feed output, nearly triple the fed cattle—that's the record for Nebraska since 1940.

Between 1940 and 1964, the number of cattle and calves placed on feed in Nebraska increased 250 per cent, in the West North Central Region, 124 per cent, and in the U.S., 153 per cent.

Output of feed grains in the state is probably the biggest cause of the boom in cattle feeding. Corn and sorghum grain production (corn equivalent) for the 1940-64 period increased 206 per cent in Nebraska. The increase in the region was 83 per cent and in the U.S., 76 per cent.

The introduction of hybrid grain sorghums and the addition of 2,000,000 irrigated acres were main reasons for the increase in grain production. (*33*)

Since the first corn husking and barn raising, cooperation has been a part of the rural scene in America. As ever, farmers and their neighbors—often enough today in the town nearby—find it profitable, frequently essential, to pool resources for a variety of needs. Whether it is a county school system, a new government building or a flood control project, cooperation among the communities helps to harmonize farm and city interests.

A recent study points out the variety and scope of cooperation among local governing bodies, from the county board to the state legislature, working on multi-million dollar power projects or a bookmobile for the isolated farm family. A few case histories from the study illustrate the types of intergovernmental cooperation.

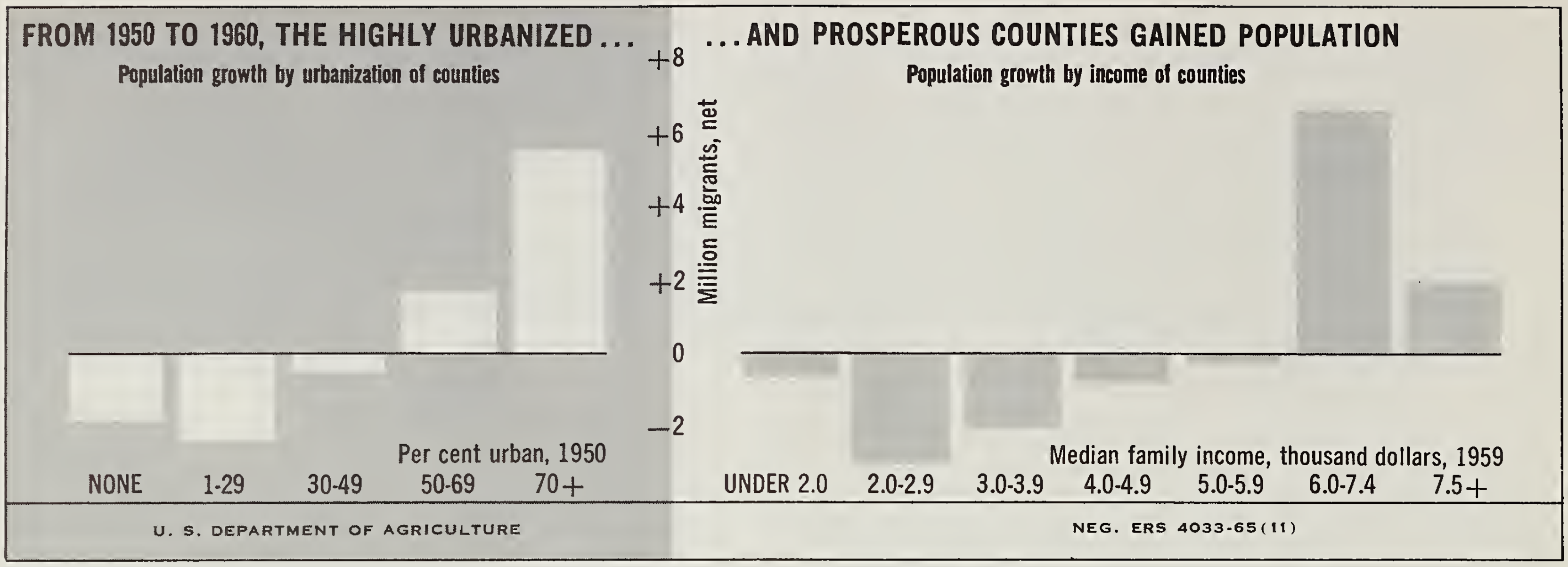
COOPERATION COMPOUNDS ASSETS

—Firemen in one Alabama town will answer the alarm in any part of their county. They can do it because the town's force is backstopped with equipment in three neighboring communities. This fire protection for the countryside rests on an informal agreement among four cities, implemented by the state code authorizing firemen to go outside city limits in case of fire or other disaster and providing immunity from tort liability.

—The city needed a new city hall; the county needed a court house. These local governments in Indiana got the two buildings they wanted in one. With the help of a specially constituted building authority, supervised by separate city and county boards of directors, the community has spacious new offices in the double facility. The two governments shared construction costs and they rent space from the building authority. Rentals are used to pay off construction bonds and maintain the building. The project has been so successful that the building authority was authorized to construct a needed extension on the hospital.

—Tiring of million-dollar losses left in the wake of annual spring floods, Nebraska farmers and townspeople organized a watershed district some years back to control the waters in a 1,000 square-mile area. The district's work is supervised by a 20-man board of directors elected from communities in the entire region and requires the coordination of a range of local, state and federal programs. The area now has the needed flood control facilities and a bonus in waterways for recreation.

—Rural and city families in mid-Nebraska have more books to read than their local libraries own. Through a contract arrangement with a central regional library, books can be borrowed from any of the libraries in the six-county area. (*13*)



Promise of More Jobs, Higher Incomes Lures Rural Youth to Urban Counties

They aren't all heading west, but young men in this country *are* still heading toward their own personal frontiers of economic opportunity. They're going where the jobs are. And the rural counties that don't have the jobs are losing their most precious resource.

In the decade from 1950 to 1960, nearly 2.5 million young adults (20-29 years old in 1960) moved from more rural to highly urbanized counties. And the gains were largely concentrated in the group of counties with highest income levels. The trend is strikingly illustrated by the gains or losses of counties grouped according to median family income in 1959. For this analysis, ERS and Oklahoma State University used seven income classes ranging from under $2,000 to $7,500 and over (see chart above).

Net population gains in the decade occurred *only* in the group of counties which had 1959 median family incomes of $6,000 and over. And this was true for most age groups, not just young adults. All county groups with incomes under $6,000 had migration losses in both male and female populations, with the rates of net out-migration increasing consistently as the level of median family income declined. The groups of counties with median income under $3,000 lost 23 per cent of their total surviving population and *half* of their young adults.

Some states are tremendously attractive to migrants. For example, of the highly mobile group that was 25-29 years old in 1960, California gained 400,000 in the decade. New York and Florida each gained over 120,000.

The South and North Central Regions both lost population while the Northeast and West gained during the migrations of the 1950s.

The two northern regions lost whites, gained nonwhites; the West gained substantially in both color groups.

The South's net loss of nonwhites from 1950 to 1960 was 1.4 million, with most age-sex groups contributing. But the South at the same time had a nominal gain among the white population. These were mostly middle-aged and older adults, who more than offset the exodus from the South of younger white people. (*14*)

Self-Employed Farm People Receiving Substantial Social Security Benefits

Self-employed farm people have only been covered by social security since 1955. But they've been receiving a large amount of benefits relative to the taxes they've paid into the system.

The reason: the large number of older farmers who quickly acquired an insured status and became entitled to benefits.

About 3.4 million people reported self-employment income from farming for social security purposes for one or more years between 1955 and 1961. By the end of 1961, 1.1 million of them (or their survivors) had become eligible for social security benefits. Some qualified entirely through farm earnings, others on a combination of farm self-employment and nonfarm wages.

An estimated $500-$780 million in benefits was divided among retirees and their dependents, the disabled and survivors during 1961. In that year self-employed farm people paid about $240 million in social security taxes.

Benefits are based on the amount of earnings and the length of time taxes are paid into the system.

About half of all those reporting farm self-employment earnings in 1961 earned less than $2,000 a year, including nonfarm wages. Their retirement benefits will be correspondingly low. Older people who retired by 1961 generally earned even less.

Though small on the average, social security benefit payments to retired farmers are an important source of income. Farmers don't receive retirement income from private business firms as frequently as town and city people. (*15*)

Own Some, Rent Some: Profit Mix For Farmland in Operation Today

Farming is largely the business of farmers.

Data from the 1959 Census of Agriculture indicated that 80 per cent of all farmland operators owned all or part of the land they operated. These owners held about 75 per cent of the total farmland.

By and large, a farmer acquires ownership of land he works through purchase. An earlier nationwide survey showed that only 8 per cent of all farm land was inherited; about another fourth of the land was partially inherited. The remaining two-thirds was acquired chiefly through purchase.

Although full ownership of the land has long been a traditional goal of farmers, it is not necessarily the road to the greatest profit.

More than half the commercial farms with annual sales of less than $2,500, for example, are operated by full owners. But only about a third of the group over $40,000 a year are operated by full owners.

By contrast, the part owner is far better off. The partially-owned farm operation made up only 23 per cent of all farms and about 30 per cent of all commercial farms in 1959. But part-owners made up the largest part of the highest sales group and the smallest part of the farms with sales of $2,500 or less a year.

Also, part owners as a group average 604 acres per farm, compared with 164 acres for full owners.

Between 1945 and 1959, for example, the number of 500-acre and over farms had a total increase of over 56,000. Nearly 52,000 of this group were part-owner farms. Fully-owned farms of this size increased by 4,100 during the period, but the increase was offset by a decrease of 4,800 tenant farms.

This shift took place during a period when the total number of farms declined by 2.1 million.

Managers as a type of operator make up the smallest proportion of farm operators, but the size of their enterprises is vastly greater than it is for any other group. In 1959, there were only 21,000 manager-operated farms — less than 1 per cent of the total. But they operated about 10 per cent of the total farmland and averaged over 5,000 acres per farm. (*16*)

What Is an Acre Worth? Erosion's Price Exceeds Loss in Land Income

How much does a gulley cost? About $603 for each acre destroyed.

This is the estimate for the Deep Loess Hills area that spans northeastern Missouri and western Iowa.

The first thing destroyed by a gulley is the land itself, and an acre of farm land in the area is currently worth $227 on the average. Since the calculations are based on moderately high management abilities and better than average land improvement practices, the land value is raised to $250 to allow for the higher returns expected.

There is, of course, some value left in land even when a gulley has eliminated the land's value for cropping. The residual would be about $35 for unimproved pasture or for wildlife uses. The net loss in market value, thus, is $215, a loss of $12.90 in net land income at 6 per cent interest.

And there is an additional loss. It is the reduction in the social productivity of capital.

For a working estimate of the social productivity loss, the economists assume an amount equal to the loss in market value. This is another $215.

When the land loses its market value, local governments lose a portion of their tax base. At 80 cents per $100 of property value, the tax loss would be $1.72. The capitalized value of this tax income, at 3 per cent, would be $57.

At this point the losses for each acre of cropland gullied out of existence amount to $487. The remaining $116 represents loss of income to nonland fixed capital, and to family labor and management.

This is the capitalized value of the annual income lost from the unemployed capital, labor and management. In time, the inputs could be employed on additional land purchased, more intensive use of the remaining land or with other such adjustments. Thus, the loss is depreciated over a 10 year period.

Total loss to the farmer and the community—$603 for every acre eroded out of existence. (*17*)

The Wet and the Dry

About 400 million acres, or one-eighth of the world's arable land is irrigated today. Three-fourths of this is in Asia. The United States has about 37 million irrigated acres; 93 per cent of this total is in the 17 Western States.

Though irrigated crops are planted on only 8 or 9 per cent of the total U.S. crop acreage, they account for 20 per cent of the value of all harvested crops. By market value, the leading irrigated crops are cotton, vegetables, tame hay, potatoes, sugarbeets, corn, sorghums, barley and wheat.

Gravity irrigation—using ditches, furrows, border dikes and various similar flooding techniques—is used on 90 per cent of the acreage in the older irrigated areas. including the West, the Mississippi Delta and Florida.

Overhead or sprinkler irrigation is gaining in popularity in all parts of the United States, as well as in foreign countries. Compared with 2 per cent in 1950, about 12 per cent of the 6 billion total of irrigated acreage is now sprinkled. The 31 Eastern States average 46 per cent for sprinkling and the 17 Western States plus Hawaii average 12 per cent. (*18*)

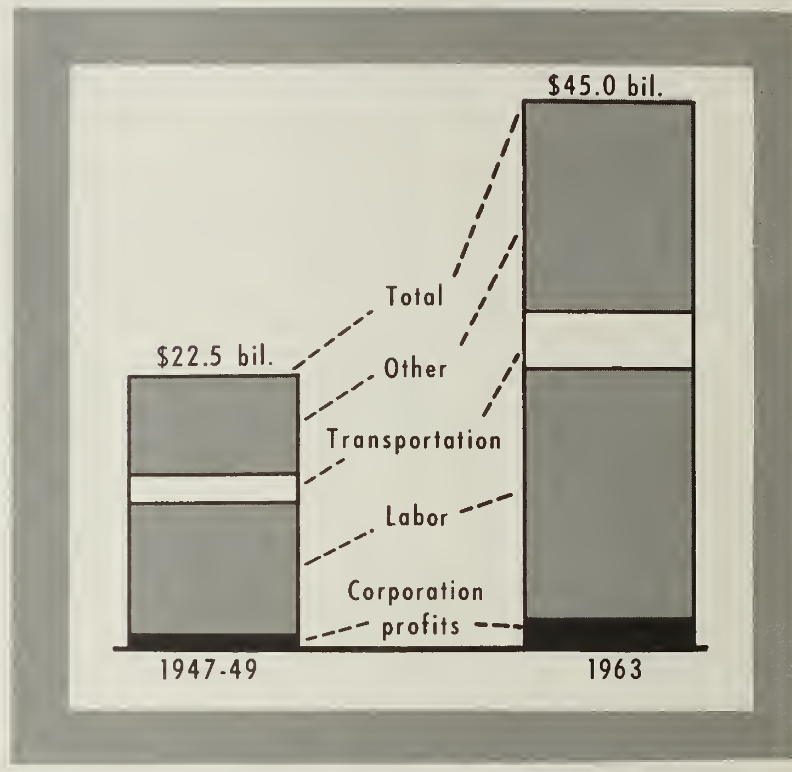
THE QUIET REVOLUTION

ERS's Marketing Economics Division spent a year analyzing the innovations that have quietly changed the face and character of the food marketing industry in the last two decades.

Specialists looked at innovations in the way we market such commodities as cotton, dairy products, grain, poultry, tobacco and even peanuts. And they reviewed the broader picture—what's happened to marketing costs, labor productivity, transportation and retailing.

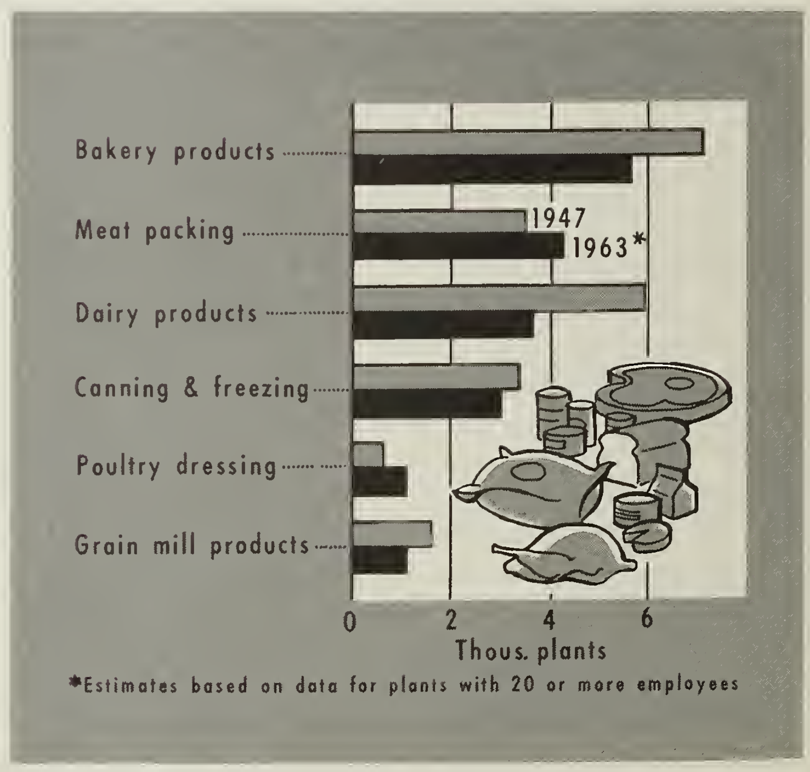
The full study will appear in book form as *Agricultural Marketing and Change.* These charts are taken from an already published pamphlet which presents a condensation of the study's findings.

MARKETING BILL. There are two main reasons why the national farm food marketing bill more than doubled from 1947-49 to 1964. First, the volume of food marketed rose one-third. Second, marketing services increased by nearly one-half.



1947-49		1964
$18.3 bil.	Products marketed, farm value	$22.5 bil.
$22.5 bil.	Value added by marketing	$47.3 bil.
$40.8 bil.	Consumer expenditures	$69.8 bil.
4.3 mil.	Marketing workers*	4.8 mil.°
146.0 mil.	Consumers (U.S. population)	192.5 mil.

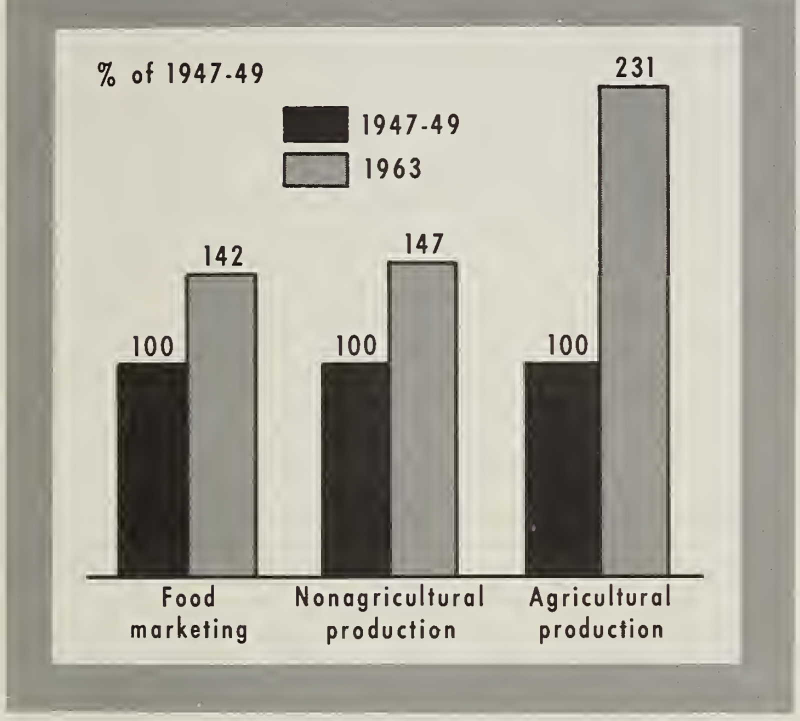
*On full-time-equivalent basis.
°Estimate for 1963. Little change expected for 1964.



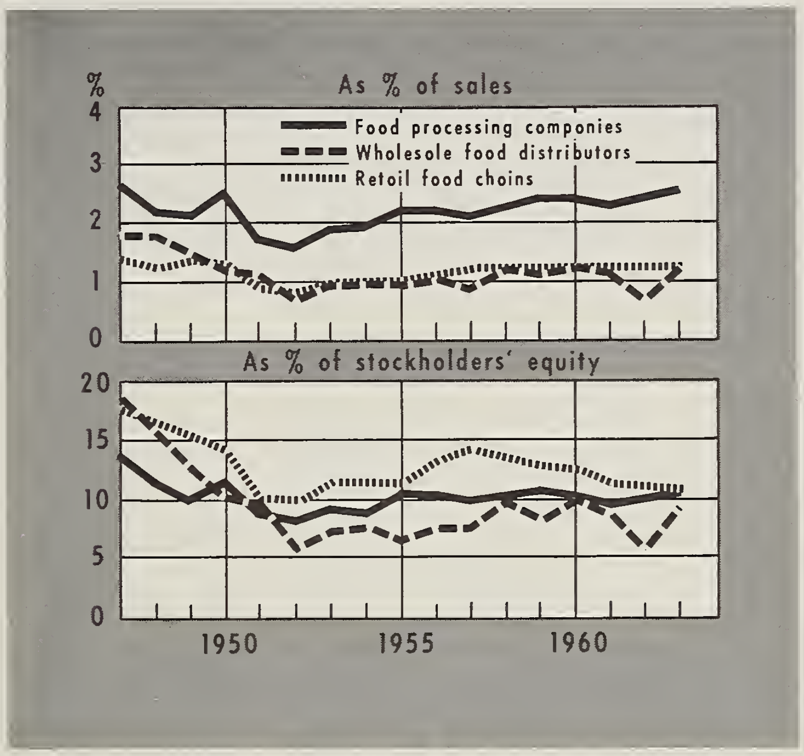
MARKETING CHANGES. Compared with 1947-49, the marketing system today handles a greater volume and variety of products, employs more workers, serves more consumers. This has sharply upped the value added to foods by marketing.

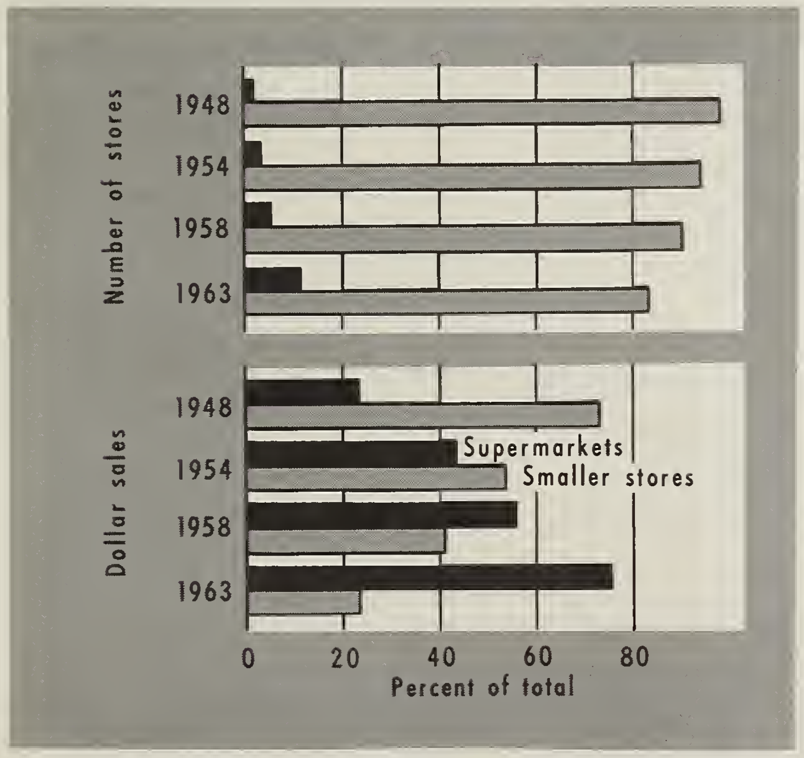
PROCESSING PLANTS. Fewer and bigger is the general trend. Exceptions: There are more meatpacking plants because operations have been decentralized, more poultry dressing plants because of a dramatic increase in volume processed.

OUTPUT PER MAN-HOUR. Workers in the food marketing industry have increased their productivity about as fast as those in other segments of the economy. But farmers have left both groups way behind in increasing output per man-hour.

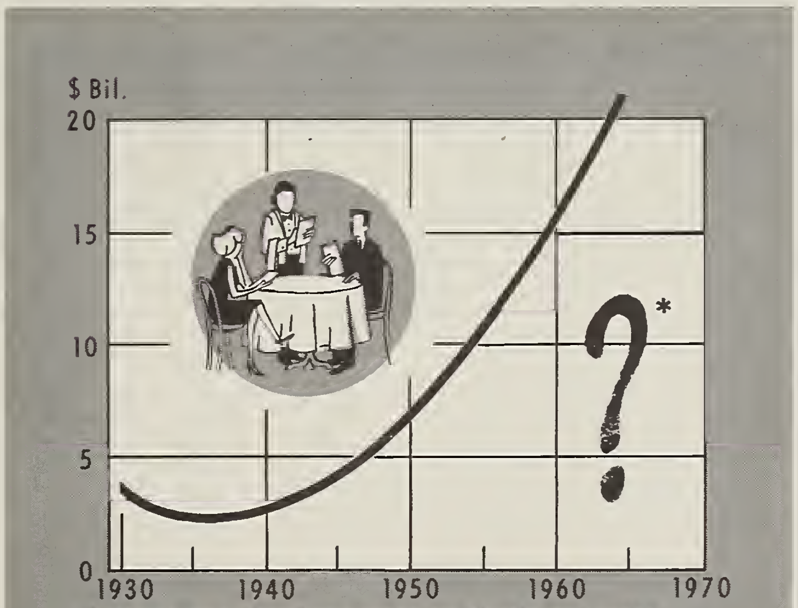


PROFITS. Corporate profits of leading food marketing firms have fluctuated within a narrow range since the early 1950s—this is true whether measured as a per cent of sales or as a per cent of stockholders' equity.





STORE SIZE. Biggest change in food retailing has been the rise of supermarkets. With only 12 per cent of all stores, they get three-fourths of all grocery sales. In 1948, they had only 2 per cent of stores, 26 per cent of sales.



*Data on away-from-home eating are sketchy and varied. The composite trend line shown here was derived from data from several sources.

EATING OUT. One of the least documented postwar marketing changes has been the great increase in away-from-home eating. It's estimated that over $21 billion was spent this way in 1964. About three-fourths of it was spent in restaurants. (*19*)

Surveys Show How, Why Housewives Substitute One Orange for Another

Do price changes for one type of Valencia orange cause consumers to buy another type of Valencia orange? Yes, when the choice is between fruit from within the same state; not as much if the choice of fruit is interstate.

This, roughly, is what was learned by marketing and agricultural economists of the Florida Agricultural Experiment Station, cooperating with USDA's Economic Research Service. The specialists studied consumer reactions in retail grocery stores in a midwestern city. The consumers were faced with choices among one size of Valencia orange from California and two sizes from each of the producing areas in Florida, the Indian River and Interior Districts.

Tests were conducted in nine stores over a period of six weeks. In each store consumers could choose from among three displays of Valencia oranges. In six of the stores consumers could choose size 138 (2 4/10-inch diameter) oranges from California, size 200 (2 7/8-inch diameter) oranges from the Indian River District of Florida, or size 200 from the Interior District of Florida. In three stores the choice was among size 138 California oranges and size 163 (3-inch diameter) fruit from the Indian River and Interior Districts of Florida.

In a predetermined fashion, the oranges were priced at 4-cent intervals above and below pre-test base prices of 49 cents a dozen for the Florida oranges and 59 cents a dozen for the California fruit.

The price range of Florida Valencias tested was 33 to 65 cents a dozen in all stores. The price of the California fruit ranged from 43 to 75 cents during the tests.

On the average, consumers bought about 3 per cent fewer oranges when prices rose by 1 per cent. The reverse also was true: When prices were lowered 1 per cent, about 3 per cent more oranges were sold.

In the tests involving size 138 California oranges and size 200 Florida oranges, when the price of Florida Interior Valencias rose or fell 1 per cent, the sales of Indian River fruit changed 1.2 per cent in the opposite direction. The effect on sales of Interior fruit was even greater: 1.6 per cent, when the price of Indian River Valencias changed by 1 per cent.

Changes in price for California fruit had no appreciable effect on sales of Florida fruit nor did change in price for Florida fruit affect sales of California fruit. (*20*)

Rail Lines Reach for More Traffic; Adding to Services, Reducing Rates

What's down the line for railroads? Here are highlights from a recent survey of the transportation situation, present and future.

New equipment and methods. Piggyback carloadings should continue to increase. In 1955 they amounted to 168,150 carloads; estimates for 1965 were in excess of 1,000,000. One example of the trend is the traffic from California. Between 1963 and 1964, piggyback shipments of fresh fruits and vegetables to out-of-state points increased from 3,599 car equivalents to 8,832, or 145 per cent in one year. This type of service was extended last year, with further increases expected for 1966.

Use of "Big John" hopper cars was given a boost by the Interstate Commerce Commission in September last year when it declared that lower freight rates for the giant cars were legal, simultaneously striking down similar rates for standard boxcars. The ruling should push rail lines not now using the big hopper cars into adding the service.

With more cars, and bigger ones, refrigerator capacity more than doubled between 1959 and 1964, increasing from 875,000 to 2,067,000 tons.

The trend in ratemaking. Some railroads have offered fruit and vegetable shippers schedules of decreasing rates per unit as load weight per car increases. A variation provides a flat rate for the car, permits shippers to load as many pounds as they desire. Schedules for multiple car shipments also cut rates for the big shippers.

Point-to-point rates offer some of the price advantages truckers alone offered in the past. Previously, groups of origin and destination points were used for making rail rates and the groups could cover a lot of territory. The point-to-point system aligns rates more closely with actual mileage hauled.

However, railroads must continue to reduce costs to retain their position as major haulers of farm products. Geographic and commodity rate relationships will be altered. (*21*)

What's New In Marketing Research

Each month *The Farm Index* reports announcements of significant new projects to be undertaken by or for the Economic Research Service.

Marketing Margins and Costs for Sugar Beets, Sugarcane, Peanuts and Leaf Tobacco for Selected Consumer Products. This is one of several continuing studies of factors affecting the marketing margin for agricultural commodities. These studies provide information for research publication and for special reports for departmental, congressional and industrial use. These studies are important to the National Commission on Food Marketing.

The studies measure and analyze farm-retail price spreads and relate them to marketing practices, channels and services, consumer preferences, prices and other market factors. (*22*)

PER CAPITA WORLD AGRICULTURAL PRODUCTION SLIDES IN 1965 (1957-59 = 100)

Region	1960	1961	1962	1963	Preliminary 1964	Estimate 1965
Canada	104	90	109	116	106	113
United States	103	102	101	104	101	104
Latin America	98	101	100	101	97	101
Western Europe	106	104	108	111	109	110
Eastern Europe	105	101	101	106	110	105
Soviet Union	97	101	100	93	106	96
Far East [1]	105	106	104	106	107	105
Western Asia	95	99	103	104	103	104
Africa	104	99	104	104	104	103
Australia-New Zealand	104	103	108	110	111	103
World [2]	99	98	100	101	101	100

1 Excludes Communist Asia. 2 Includes estimate for Communist Asia.

WORLD ROUNDUP: THE YEAR AHEAD

The world's nurseries out-produced the world's farms last year. There was a 1½ per cent increase in food production while the population rose by 2 per cent.

Most of the trouble centered in the Soviet Union, Eastern Europe, Australia and Asia. Here are highlights of the agricultural situation for the various regions:

Western Hemisphere. With the weather on the farmer's side agriculture set new records, recovered from the low level of 1964.

U.S. agricultural output increased 4 per cent with corn and soybeans up 18 and 23 per cent, respectively, over 1964.

Canadian farm production was up 9 per cent in 1965, exceeding the record level of 1963. The Canadian wheat crop is estimated at 678 million bushels, still short of 1963's record 723 million bushels, but well above the 600 million bushels produced in 1964.

Latin American output, up about 8 per cent for 1965, increased faster than the population. Weather again made the difference.

Latin American agricultural output may show further gains in the coming year, but at a lesser rate than in 1965.

Western Europe. Wheat production in 1965, estimated at 44.0 million metric tons, reached a new record high, even though production was off from the 1964 level in more than half the nations.

However, the poor quality of the 1965 wheat crop in Western Europe seems likely to increase import needs for quality wheat for blending in 1966.

Eastern Europe. Drought in the eastern spring grain regions and cold wet weather in the western winter grain region combined to cut agricultural output in the Soviet Union sharply from the peak level of 1964. Even so, it was still much above the disastrous levels of 1963.

The new Russian farm program announced in March 1965 may help overcome some of the difficulties that beset the nation's agriculture from 1958 to 1962.

Africa. With good weather and somewhat larger harvested acreage, farmers north of the Sahara pushed output 3 per cent ahead of 1964's record levels.

But despite the rising level of output, approximately 3 million metric tons of bread grains, along with some dairy products and vegetable oils, will be needed during 1966 if present levels of food consumption are to be maintained.

South of the Sahara farmers produced about 1 per cent more than in 1964. The coffee crop is reported 8 per cent larger than 1964; cocoa beans should be the second largest crop on record, though some 10 per cent lower than 1964.

The Far East and Communist China. Because of poor weather the level of grain production in South Asia for 1965/66 will be sharply below the record outturn of 1964/65.

For India, imports of food grains will probably be higher in 1965/66 than the 7.4 million metric tons imported in 1964/65. Even so, per capita consumption may not be maintained.

The most notable development in Japan was the continuing rapid expansion of the livestock industry and the resulting increase in imports of feed grains, principally corn from the United States.

Production of food crops in Communist China for 1965 was about the same as 1964. The estimated output of grain in 1965 is, in fact, 2 to 3 per cent below the officially claimed figure of 185 million tons in 1957.

Oceania. New Zealand's farms have increased their output for 1965/66 while Australia, suffering drought, is seeing curtailed harvests. (*23*)

West Asia Tries to Up Food Output But Water Lack Still Hampers Area

West Asia, despite its largely arid and saline soils, wrests a long list of farm products from the land. A third of gross regional product comes from agriculture.

The big problem is water because about 40 per cent of the region is desert. The famed Fertile Crescent of Asia Minor covers parts of West Asia. But only about a fifth of all the land is even marginally arable.

Farming in West Asia is largely concentrated among eight nations: Turkey, Iran, Iraq, Syria, Lebanon, Jordan, Israel and Cyprus. The 10 countries of the sparsely populated Arabian Peninsula produce little of agricultural significance except dates and livestock. In all, some 73 million people live in West Asia; seven out of 10 of them work in some phase of agriculture.

The most important crops are grains: wheat, barley, sorghums and millets, corn, rye, mixed grains and oats.

Rice, prized for its high yields, could be a more lucrative crop if it didn't require such an abundance of water. Rice production also is limited by law in some West Asian countries to control malaria because paddies breed mosquitoes.

The sunna fly is another handicap to farm production. In many of the drier areas, barley supplants wheat since its early maturity foils the sunna fly.

The significance in West Asia of tree and other fruits is great. Both wild and cultivated vineyards yield table and wine grapes as well as raisins and currants. Other deciduous fruits, citrus fruits, dates, figs, olives, olive oil and nuts add importantly to export earnings.

Cotton and sugar beets for sugar are commercial crops. Another source of cash is Oriental tobaccos. Modest amounts of highly prized mocha and coffee arabica grow along the mountainsides of Yemen, the one country of the Arabian Peninsula almost completely dependent on agriculture.

Sheep and goats are the leading animals herded in West Asia. In addition to food for the regional supply, their wool, hair and skins are traditional sources of farm income.

Agricultural exports hike the foreign exchange earnings of the entire region. Lately, however, imported farm goods have increased in value because of short crops resulting from a succession of droughts complicated by the rising rate of population growth, currently at about 3 per cent a year.

Between 1957 and 1962 the value of major farm imports increased more than 40 per cent, major farm exports only 12 per cent. A third of the imports come from the United States, largely under special programs that permit West Asian nations to pay in their own currencies.

Although the value of all imports is consistently higher than total annual exports, including oil, in normal times agricultural exports earn from 25 to 40 per cent more than the cost of agricultural imports. *(24)*

Built to Last

Not the least of modern man's heritage from ancient Rome and Persia are water works still irrigating parts of West Asia.

Roman irrigation systems, built some 2,000 years ago, and renovated by succeeding generations of farmers, are still watering crops in the Levant.

Thousands of *Qanat* tunnels—underground canals of ancient Persian origin—today moisten large tracts, mostly in Iran. Ages-old small canals and dikes even now run water into Yemeni fields and cisterns.

Today's trend, however, in each of West Asia's farming nations, is toward exploitation of new water resources to irrigate more land by modern methods. *(25)*

Sofia Seeks Easier Trade Terms From U.S. for Its Exotic Exports

Attar of roses for milady's perfume, paprika and cheese for the gourmet's table — these exotic items head the list of U.S. imports from one of the lesser known communist satellites, Bulgaria.

Other items on this small but varied list are wild pig and hog skins, poppyseed, bristles and dehydrated onions.

On the agricultural side the United States has sold to Bulgaria in most recent years only small quantities of seed corn and beans for planting. U.S. farm exports to Bulgaria in 1963 were a scanty $91,000. This jumped to an unusual $4.8 million in 1964, over half of it cotton.

Although small, the balance of trade is usually in favor of Bulgaria, and it could afford to buy moderate quantities of U.S. farm products, especially wheat, cotton and livestock feed. Most years the Sofia government has to make up deficits in domestic production of these three commodities with imports.

Bulgarians say any real expansion of U.S.-Bulgarian trade depends on their getting most-favored-nation treatment from us.

Another factor, of course, is Bulgaria's future relationship with the Council for Economic Mutual Assistance (CEMA) set up in 1949 as the Communist Bloc answer to Western Europe's Common Market.

This trade union includes the Soviet Union, its six East European allies, plus Outer Mongolia. (Albania, a charter member, hasn't actively participated since 1962.)

One of the Council's precepts is that each member should produce and export to other members those products, agricultural or industrial, which it is best able to produce. For Bulgaria, despite postwar efforts toward industrialization, this means agricultural products, specifically such crops as

fruits, vegetables, tobacco and aromatic oils.

Whereas Bulgaria's prewar exports were sold throughout Western Europe, today's small shipments to the West go primarily to West Germany and Austria. Of the 650,000 metric tons of fruits and vegetables exported in 1963, fully 86 per cent went to Bloc members of CEMA.

Bulgaria has made impressive gains in upping exports, particularly fruits, in less than a decade.

	1955	1963	Increase
	Metric tons		
Fresh tomatoes	32,606	205,848	6 times
Tomato puree	8,797	34,564	4 times
Apples	3,351	41,718	12 times
Dessert grapes	30,752	203,700	7 times

On the home front Bulgaria's socialized agriculture hasn't made the progress the government had hoped. The production index is just about keeping up with population growth.

Meat comprises only about 5 per cent of the national diet, and food rationing isn't uncommon.

Agriculture needs more fertilizer and other chemical and industrial inputs to increase food production for domestic consumption.

But with Bulgaria shipping most of its exportable commodities to Bloc countries on a barter basis (Bloc currencies are nonconvertible even among themselves) it can't buy much from convertible (hard) currency areas like Western Europe and the United States. Only time will tell whether Sofia will elect to stay within the CEMA framework or shift its trade toward hard currency areas. (*26*)

Primitive, But Practical, Patchwork Farming Adapts to Nature's Cycle

Call him Jose Sanchez. He's a farmer on the edge of the Amazon rain forest.

Like millions of subsistence farmers in the tropics, from Brazil to Borneo, he farms as his ancestors did—a patch of land here, another there, each surrounded by the gnarled trees and tangled undergrowth typical of a hot, humid climate.

Based on the North American experience in the North American climate and terrain, Jose Sanchez runs an inefficient operation with poor crop yields and low returns to labor. Yet given his own harsh environment, he utilizes the wisdom of many generations to wrest a living from land that would otherwise produce nothing.

At the present low level of capital inputs and technical know-how, survival for Sanchez and his counterparts rests in the patchwork pattern of cultivation.

The soil is the key. Vegetation both grows and decays rapidly in the tropical heat and the decomposing organic matter nourishes the thin layer of humus beneath. Thus, constantly enriched, the humus layer, though thin, can support the dense vegetation and the growth-and-decay cycle is sustained.

Small patches of cleared land like those Jose Sanchez cultivates don't disrupt the cycle. But cleared fields large enough to farm efficiently do. Deprived of its organic feeding, the soil quickly disappears under the pounding of torrential rains.

Even Sanchez' small patch system has its limitations. To provide foliage during the growing season he interplants a variety of corps. This shifting cultivation rapidly exhausts the soil. After three or four crop years the patch must be left fallow anywhere from 10 to 20 years.

This is only one of the many physical problems confronting tropical nations trying to raise farm output. ERS economists examine the problems and potentials in "Land and Other Natural Resources," one chapter in a new study for the Agency for International Development (AID). The overall study assesses the agricultural progress and slippage since 1948 in various parts of the less developed world and the factors that have contributed to the changes, good or bad.

The chapter points out that the rain-flooded or irrigated rice paddy may well become one of the most important ways to overcome the limitations of tropical soils. It offers farmers a chance to produce enough carbohydrates to sustain life and to do it with little manure, without fallow periods and without risk of erosion or soil exhaustion.

However, as with most proposed solutions to the food problems in tropical countries, this one is currently forestalled by a gaping hole in the area of water resource research.

Although rainfall is heavy in the tropics, it tends to be sporadic throughout the year, and virtually no country in the region has made a thorough survey of its rainfall and how to trap it for year-round use.

With far less precipitation, arid countries have a similar problem—how best to use what water they have.

The ERS analysis for AID, therefore, implies that assistance in water resource research is one way in which the United States could help emerging countries make the most of their physical environment to increase food output. (*28*)

Why Some Succeed

Twelve nations as diverse as Brazil and Sudan that are usually thought of as part of the underdeveloped world actually upped farm output faster than the United States from 1948 to 1963.

These countries are cited in a new ERS study made for AID. The study measures the levels and changes in farm production in 26 countries. It also assesses the impact of land tenure practices, technology and other factors on farm output.

Single copies of *Changes in Agriculture in 26 Developing Nations* are available free from the Office of Information, U.S. Department of Agriculture, Washington, D. C. 20250. (*27*)

EEC Imports Likely to Jump in '66 As Consumers Add More Meat to Diets

Again in 1966 the six-member European Economic Community (EEC) is expected to buy more meat abroad than ever before.

ERS economists project the figure at 1.5 million metric tons, 100,000 more than in 1964 and well over twice the 688,000 tons the Community took in 1962.

The growing demand for imported meat is due to several factors. After a meteoric climb in the 1950s, the Community's own meat output (about 9.7 million tons annually) marked time in 1963 and 1964, primarily because of a downturn in beef production. It would appear that beef output in 1965 was up again slightly. Pork hit the low point in its production cycle in 1963 and has rebounded fairly sharply since. Thus, with both beef and pork up, total meat output likely climbed to about 10 million tons last year. The projection for 1966 is up again, to 10.4 million.

Despite the Community's improved position, it's still feeling the effect of the 1963-64 slump in beef output. While meat production held steady, both population and consumer income kept growing. More people with more money to spend invariably means a greater demand for meat. Last year the gap between EEC production and consumption was about three times what it was in 1962.

By mid-1966 the Community will have some 180 million people. Each one of them will account on the average for 140 pounds of meat, 9 pounds more than in 1964 and 24 pounds more than in 1960. Consequently, total meat consumption will run around 11.7 million metric tons. (*29*)

Volume Up, Prices Down; U.S. Farm Exports Heading Toward New Record

This fiscal year looks like another record one for U.S. agricultural exports.

Some $6.2 billion worth of our farm products will probably go out to the world during 1965/66. This is an advance of $100 million over last year. Gain in volume should be even more as many of this year's commodities carry a lower price tag than last year's.

Most of the gain will be accounted for by expanded dollar sales or shipments under government-financed programs.

Biggest reason for the rapid rise is continued economic growth of Japan, Canada and the industrial nations of Western Europe.

Also, the Soviet Union has emerged again as a big importer of wheat from the free world. USSR purchases are already abreast of their 1963/64 level and should be far ahead by July.

To underdeveloped countries most of our food and fiber exports will continue to be shipped under title I of Public Law 480 (whereby underdeveloped nations buy U.S. commodities with local currency).

The export boost this fiscal year will put more corn, grain sorghums, wheat, rice, tobacco, soybeans, fruits and variety meats on foreign docks. However, we will sell less cotton, dried beans, vegetables, dairy products, lard and beef this year.

The United States will keep up its vigorous overseas sales campaign this year. Our participation in product demonstrations, trade fairs, trade centers and technical aid should improve access to world markets. (*30*)

Foreign Spotlight

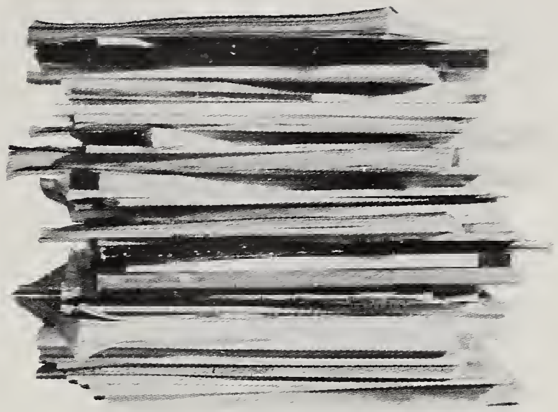
COMMUNIST CHINA. Three big wheat deals in the past few months will bring a record 6.6 million tons of grain to the Peking government in 1965/66. Despite this high import figure China's rapidly-increasing population and food production at the same level as last year indicate that the country's low level of per capita food consumption is dropping even lower.

Biggest supplier will be Argentina, with 2.4 million tons. Agreements with Canada call for another 2.2 million, and Australia's new crop will add 500,000 tons to the 1.5 million they've already sold to Communist China.

TRINIDAD. Last year set a record for sugar production on the small Caribbean island as the harvest totaled more than 250,600 metric tons, a gain of over 10 per cent from the 1964 harvest. Producers now look hopefully toward a near-future harvest of 300,000 tons.

COSTA RICA. The National Coffee Office estimates that the 1956/66 coffee crop will reach 108,000 metric tons, 20 per cent larger than the previous year's harvest. And, for Costa Ricans who like it "with," a countrywide cooperative recently got governmental approval for a condensed and evaporated milk plant project.

MALAYSIA. Despite Singapore's withdrawal, the remaining territories of Malaysia are moving toward creation of a common market as part of a national unification effort. Biggest step came when the government declared some 160 locally-produced items duty-free in their movement between the mainland Malay States, Sarawak and Sabah. (*31*)



recent publications

The publications listed here are issued by the Economic Research Service and cooperatively by the state universities and colleges. Unless otherwise noted, reports listed here and under Sources *are published by ERS. Single copies are available free from The Farm Index, OMS, U.S. Department of Agriculture, Washington, D. C., 20250.* ***State publications may be obtained only by writing to the issuing experiment station or university after the title.***

FARM COSTS AND RETURNS: COMMERCIAL FARMS BY TYPE, SIZE, AND LOCATION. W. D. Goodsell and others, Farm Production Economics Division, Agr. Info. Bul. 230.

This report contains summary estimates of costs and returns in tabular form for 1964 and earlier years on 42 important types of commercial farms.

HOMEMAKERS' OPINIONS AND PREFERENCES FOR BROILER-FRYERS AND TURKEYS. J. L. McCoy, Standards and Research Division, Statistical Reporting Service. Preliminary Report SRS-7.

Over the past 10 years there has been a simultaneous trend of increase in per capita consumption of both broilers and turkeys and a decrease in the price received by producers. This study provides data on some of the factors influencing the demand for poultry. (See June 1965 Farm Index.)

CROP-HAIL INSURANCE IN THE UNITED STATES. L. B. Perkinson, Farm Production Economics Division. ERS-249.

Farmers are increasing their use of crop-hail insurance. In 1963 farmers purchased $2.8 billion of protection—double that of 1951. About 75 per cent of the total coverage was concentrated in the Corn Belt, Northern Plains and Appalachian Regions. (See January 1966 Farm Index.)

CHARACTERISTICS OF THE POPULATION OF HIRED FARMWORKER HOUSEHOLDS. G. K. Bowles and C. L. Beale, Economic and Statistical Analysis Division. AER-84.

In this study farmworker households are those households having at least one member who had engaged in hired farmwork during the year. The number of people in such households was then tabulated by the characteristics of the household head and by the amount of hired farmwork done by members of the household. (See August 1965 Farm Index.)

WATERSHED PROGRAM EVALUATION — PLUM CREEK, KENTUCKY. A. B. Daugherty, Resource Development Economics Division. ERS-243.

Under the watershed protection for the Plum Creek Watershed, two groups of improvements were recommended: flood prevention and conservation of water and watershed lands. (See November 1965 Farm Index.)

DEVELOPMENTS IN MARKETING SPREADS FOR AGRICULTURAL PRODUCTS IN 1964. Reprint from hearings before the subcommittee of the Committee on Appropriations, U.S. House of Representatives, 89th Congress, First Session, ERS-14.

The result of a special study of differences between prices paid by consumers and those received by farmers is presented.

SUPPLEMENT FOR 1965 TO STATISTICS ON COTTON AND RELATED DATA, 1925-1962. J. R. Donald, E. F. Morriss and U. C. Saunders, Economic and Statistical Analysis Division. Supplement for 1965 to Statis. Bul. No. 329.

This third annual supplement contains data for 1962-64 and some revisions for earlier years.

CHANGES IN FARM PRODUCTION AND EFFICIENCY — A SUMMARY REPORT. R. W. Hecht, Farm Production Economics Division, Statis. Bul. No. 233.

This annual publication presents the major statistical series on farm production, production inputs and efficiency. It provides the latest information for each of the several series that have been developed to appraise changes in production, changes in farm inputs and practices, improvements in labor productivity and progress of farm mechanization.

AGRICULTURAL PLANNING DATA FOR THE NORTHEASTERN UNITED STATES. Agricultural Economics and Rural Sociology Agricultural Experimental Station, Pennsylvania State University, University Park, in cooperation with the Farm Production Economics Division. Agr. Expt. Sta. Rtp. No. A.E. & R.S. 51.

This program appraises the potential adjustments northeastern dairy farmers could make at various levels of milk prices.

THE EFFECT OF DIFFERENT LEVELS OF PROMOTIONAL EXPENDITURES ON SALES OF FLUID MILK. W. E. Clement, P. L. Henderson and C. P. Eley, Marketing Economics Division. ERS-259.

In a controlled experiment over a 2-year period, significant relationships were found between promotional expenditures and sales of fluid milk. Three levels of expenditure for promotion were tested: the present 2 cents per capita annually, a medium level of 15 cents and a heavy level of 30 cents.

GEOGRAPHIC STRUCTURE OF MILK PRICES, 1964-65. F. A. Lasley, Marketing Economics Division. ERS-258.

This study of the intermarket price structure for fluid milk analyzes the current situation as well as changes during the past 11 years.

MINIMUM OPEN LAND REQUIREMENTS FOR $5,000 FARM INCOME, WIREGRASS AREA (LOWER COASTAL PLAINS), ALABAMA. P. L. Strickland, Jr., Farm Production Economics Division, and G. C. Jones and E. J. Partenheimer, Alabama Agricultural Experiment Station, Auburn. Ala. Agr. Expt. Sta. Ag. Ec. Ser. 6.

The objectives of this study were to determine the minimum acreage of openland that would be required for a labor and management income of $5,000 under various price and allotment levels. Crop budgets were developed for cotton, peanuts, oats, corn, wheat, soybeans, grain sorghum and Coastal Bermuda grass hay.

APPLICATION OF AN OPERATIONS RESEARCH TECHNIQUE TO A WOODTURNING PLANT. G. E. Frick, Farm Production Economics Division, and E. B. Penick, Jr., New Hampshire Agricultural Experiment Station, Durham. N.H. Agr. Expt. Sta., Resource Econ. Res. Mimeo. No. 38.

This paper deals with making the most efficient use of limited lathe time through selection of the most profitable combination of products.

SUGAR BEETS: ESTIMATED COSTS AND RETURNS, A PRELIMINARY REPORT. G. W. Campbell and A. G. Nelson, Arizona Agricultural Experiment Station, Tucson, and W. W. Pawson, Farm Production Economics Division. Ariz. Agr. Expt. Sta. Unnumb.

This report provides information on the estimated costs and returns for producing sugar beets in central Arizona.

FARM ROADSIDE MARKETING IN THE UNITED STATES. J. J. Milmoe Food Business Institute, University of Delaware, in cooperation with the Federal Extension Service, USDA.

The results of a 1964 survey of roadside market operators are placed into this booklet setting forth guidelines for the business. Included are chapters on choosing the kind of market and location, planning and managing the market, advertising and merchandising and controlling quality. Single copies are available for $2.00 each from Food Business Institute, University of Delaware, Newark.

CHANGES IN TRANSPORTATION USED BY COUNTRY GRAIN ELEVATORS IN THE NORTH CENTRAL REGION, 1958-63. B. H. Wright, Marketing Economics Division. MRR-724.

Economic factors have caused a steady and continual growth in the use of trucks and barges for shipping grain. Recent adjustments in rail freight rates have been aimed at curbing this growth. This report shows the changes in outward grain shipments from North Central Region grain elevators since 1948 and shows the relationship to recent changes in transportation. (See October 1965 Farm Index.)

CHANGING STRUCTURE AND PERFORMANCE OF THE NORTHEAST GRAIN MARKETING INDUSTRY, 1957-62. W. G. Heid, Jr., Marketing Economics Division, in cooperation with J. E. Martin and R. F. McDonald, University of Maryland Agricultural Experiment Station, College Park. Md. Agr. Expt. Sta. Misc. Pub. 545.

In recent years the volume of whole grain handled by northeastern grain marketing firms has been declining. Changes in the structure and performance of the northeastern grain industry associated with decreased grain marketing activities have resulted in numerous marketing problems. (See May 1965 Farm Index.)

BULGARIA'S AGRICULTURAL ECONOMY IN BRIEF. R. K. Severin, Foreign Regional Analysis Division. ERS-For. 136.

While subordinate to industry, agriculture has been receiving increasing emphasis in recent years. Agriculture employs half the labor force and accounts for one-third of the country's income. Chief imports of Bulgaria are cotton, grain and sugar—mostly from East European countries. (See January 1966 Farm Index.)

U.S. TRADE WITH THE EUROPEAN ECONOMIC COMMUNITY, 1957-64. J. R. Turns and M. L. Lacey, Development and Trade Analysis Division. ERS-For. 132.

The effects of the economic integration of West Germany, France, Italy, the Netherlands, Belgium and Luxembourg on U.S. trade are important. These countries account for a large portion of total U.S. trade, surpassed only by that with Canada. This report deals with our imports and exports with EEC countries and gives tables of past trading by country and commodity.

THE FLUCTUATION OF EEC VARIABLE LEVIES. H. G. Hirsch, Foreign Development and Trade Division. ERS-For. 141.

This paper publishes the time series of variable levy rates for grain imports by the EEC from nonmember countries through March 31, 1965. It also includes an exploratory and preliminary statistical analysis of the temporal variation in the levies.

U.S. AGRICULTURE'S FIRST YEAR UNDER EEC VARIABLE IMPORT LEVIES. T. A. Warden, Development and Trade Analysis Division. ERS-For. 134.

This study examines the effects of the variable import levy of the European Economic Community for wheat, feed grains, pork, poultry and eggs on imports from the U.S. during its first full year of operation, calendar year 1963.

OFF-FARM COMMERCIAL STORAGE FACILITIES FOR GRAIN. A. G. Schienbein, Marketing Economics Division. ERS-252.

Grain is stored in great quantities after harvest and before processing. This report deals with storage capacity growth and utilization, location of storage facilities, kinds of grain stored and type of storage facilities.

THE MARKETING BILL FOR CIGARETTES. V. M. Farnworth, Marketing Economics Division. ERS-250.

The marketing bill is the difference between the farm value and consumer expenditures for cigarettes less excise taxes. The bill for marketing cigarettes smoked in the United States totaled $3.2 billion in 1964, compared with $1.2 billion in 1947. This pamphlet gives a breakdown of the manufacturing and wholesaling-retailing components of the bill during 1947-61.

SOCIAL SECURITY AMENDMENTS OF 1965: IMPORTANCE TO FARM AND RURAL PEOPLE. L. A. Jones and E. I. Reinsel, Farm Production Economics Division. ERS-257.

This pamphlet gives details of the recent social security amendments. Medicare—a program to finance hospital and other health services for nearly 19 million people, 65 years old and over—is the most publicized feature of the law. (See December 1965 Farm Index.)

AGRICULTURAL EXPORTS HELP BALANCE OF PAYMENTS. R. L. Tontz, H. W. Henderson and M. H. Spears, Development and Trade Analysis Division. ERS-For. 133.

U.S. agricultural exports are one of the major bright spots in the unfavorable U.S. balance-of-payments picture. Our farm product shipments are helping offset the dollar drain due in large part to U.S. investments abroad, cold war outlays and tourist expenditures. This report gives a brief explanation plus detailing our export earnings.

CHANGES IN AGRICULTURE IN 26 DEVELOPING NATIONS, 1948 TO 1963. Economic Development Branch, Foreign Development and Trade Division. FAER-27.

This publication deals with the performance of agriculture in the economy of 26 developing nations. Objectives of the report are: to show levels and changes since 1948 in agricultural output and productivity in these countries; and to identify and assess roles of physical, economic, and social factors associated with differences in these levels and changes.

PROCESSING FEED INGREDIENTS: COSTS, LABOR, AND CAPITAL REQUIREMENTS. C. J. Vosloh, Jr., Marketing Economics Division. MRR-731.

Two model processing operations were used in this study to show both labor requirements and operating costs. In an 8-hour shift the smaller model was set up to process 45 tons and the larger, 120 tons.

SOVIET GRAIN IMPORTS. L. Volin and H. E. Walters, Foreign Regional Analysis Division. ERS-For. 135.

The conversion of the Soviet Union from a major wheat exporter to a major importer, although in large part caused by adverse weather, is an important reversal of traditional international grain patterns which raises a number of questions as to causes and the future outlook. These questions are analyzed.

ISRAEL: SUPPLY AND DEMAND PROJECTIONS FOR AGRICULTURAL COMMODITIES TO 1975. L. E. Moe, Foreign Regional Analysis Division. ERS-For. 137.

Increased imports by Israel from the U.S. are expected—especially for such commodities as wheat, feed grains, oilseed and tobacco. (See August 1965 Farm Index.)

Numbers in parentheses at end of stories refer to sources listed below:

1. N. E. Harl and J. C. O'Byrne (SM); 2. H. G. Sitler, Costs of Selected Sizes and Types of Farm Machinery on Colorado Wheat Farms, Colo. Agr. Expt. Sta. Unnumb. (P*); 3. Cotton Situation, CS-221 (P); 4. A. G. Mathis, "Government's Role in Pricing Fluid Milk in the U.S.," Dairy Situa., DS-305 (P); 5. B. G. Freeman, R. H. Rogers and D. S. Moore, Production Requirements, Costs and Expected Returns for Crop Livestock Enterprises, Rolling Blackland Prairie of Texas, Tex. Agr. Expt. Sta., Misc. Pub. 752 (P*); 6. J. L. Esmay, Effect of Number of Lots of Cattle Fed Annually on Amount and Variation in Price Spread (M); 7. L. B. Perkinson, Corp-Hail Insurance in the United States, ERS-249 (P); 8. B. H. Pubols, Trees, Apples and Population in 1970 (S); 9. H. B. Jones, Economic Importance of the Poultry Industry in North Georgia, Ga. Agr. Expt. Sta. (M*); 10. 1966 Agricultural Finance Outlook, AFO-5 (P); 11. Wool Situation, TWS-73 (P); 12. Board of Governors of the Federal Reserve System, Farm Debt: Data from the 1960 Sample of Agriculture (P); 13. J. E. Stoner, Interlocal Government Cooperation: With Special Reference to Alabama, Indiana, Nebraska, Pennsylvania and Wisconsin (SM); 14. G. K. Bowles and J. D. Tarver, The Age-Sex-Color Composition of Net Migration in the United States, 1950-60 (S); 15. E. I. Reinsel and J. C. Ellickson, "Farmers and Social Security," Agr. Finance Rev., Vol. 26, Sept. 1965 (P); 16. H. Hill, Agricultural Land Tenure in the United States (M); 17. M. L. Weinberger, Loss of Income from Gullied Lands (S); 18. G. A. Pavelis (SM); 19. R. E. Freeman and E. E. Van Horn, Agricultural Marketing: Vital Link Between Farmer and Consumer, Marketing Bul. No. 36 (P); 20. M. R. Godwin, W. F. Chapman, Jr., and W. T. Manley, Competition Between Florida and California Valencia Oranges in the Fresh Market, Fla. Agr. Expt. Sta. Bul. 704 (P*); 21. Marketing and Transportation Situation, MTS-160 (P); 22. L. A. Powell (SM); 23. Foreign Regional Analysis Division, The World Agricultural Situation—Review of 1965 and Outlook for 1966. FAER-28 (P); 24. & 25. H. M. Holm, Agriculture of West Asia (M); 26. K. R. Severin, Bulgaria's Agricultural Economy in Brief, ERS-For. 136 (P); 27. & 28. Foreign Development and Trade Division, Changes in Agriculture in 26 Developing Nations, 1948 to 1963, FAER-27 (P); 29. D. W. Regier, EEC Meat Imports Through 1966 (S); 30. D. H. Rahe, U.S. Agricultural Export Prospects for Fiscal Year 1965-66 (M); 31. J. W. Willett (SM); 32. L. C. Martin, A Look at the Economic Picture in 1975 (S); 33. R. D. Johnson, Structural Changes in the Cattle Feeding Industry in Nebraska. Nebr. Agr. Expt. Sta. (M).

*Speech (S); published report (P); unpublished manuscript (M); special material (SM); *State publications may be obtained only by writing to the experiment station or university cited.*

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Long Stem Paradox

A dozen yellow roses for the hostess with a small card enclosed: "To thank you for the delightful weekend party.

This gracious gesture is less in evidence these days than it used to be. Some people seem to think of fresh flowers only for Christmas, Easter and Mothers Day.

This may reflect some change in our social customs, but it's had a definite economic effect on one group of Americans—the commercial rose growers and sellers.

An ERS analysis points out that from 1949 to 1964 our gross national product climbed 71 per cent. Disposable income jumped 72 per cent. Per capita income went up 51 per cent. Yet during this period of rapid economic growth, the value of rose production actually decreased by 5 per cent in the 11 states included in USDA's annual survey of cut flower production.

These figures show that rose growers and handlers haven't shared proportionately in the nation's increasingly prosperous economy.

What can rose growers do to increase their share?

Economists suggest better production and marketing information is needed to keep rose and other flower growers, wholesalers and retailers aware of supplies and prices around the country.

And economists see the need for consumer research to find out why people buy or don't buy roses. A sampling of consumer opinions and attitudes could help rose growers and florists plan advertising and market strategy. (*32*)

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Numbers in parentheses at end of stories refer to sources listed at end of issue.

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